

### REMARKS

Claims 1-20 are currently pending in the case. Claims 1-8, 12-15 and 17-20 have been withdrawn from consideration in the Paper filed on December 1, 2003. Claims 9-11 and 16 are under consideration, and stand rejected under 35 U.S.C. § 102(b) based on arguments laid out in the Final Office Action mailed on June 13, 2005. Applicant thanks the Examiner for the careful examination of this application and respectfully requests reexamination and reconsideration of the case, as amended.

The present Amendment amends Claim 9 and cancels Claims 1-8, 11-15 and 17-20.

Applicant respectfully submits that the deletion of any claims and any other loss of claimed subject matter is being made solely to expedite prosecution of one aspect of the invention and is not meant to impact Applicant's right to pursue the cancelled claims or subject matter. In fact, Applicant is concurrently filing (*i.e.*, on the same day) divisional applications directed to the cancelled subject matter.

Below, Applicant addresses each of the rejections levied in the Office Action and explains why the rejections are not applicable to the pending claims as amended.

#### Amendments to the Claims

Claim 9 has been amended to include a limitation regarding the monoclonal antibody that binds to CX3CR1 or human fractalkine and inhibits chemotaxis of killer lymphocytes by suppressing an interaction between CX3CR1 and fractalkine. As amended, claim 9 specifies that the monoclonal antibody is obtained by selecting a monoclonal antibody that suppresses the interaction between CX3CR1 and fractalkine. Support for this amendment can be found, for example, on page 13, last paragraph, of the application as originally filed. Applicant respectfully submits that no new matter is added through the proposed amendment of claim 9.

#### Claim Rejections – 35 U.S.C. § 102(b)

Claims 9-11 and 16 stand rejected under 35 U.S.C. § 102(b), on the ground that they are anticipated by U.S. Pat. No. 6,013,257 (hereafter the '257 patent) to Pan *et al.* as evidenced by

Hoover *et al.* (J. Biol. Chem. 2000, 275(30): 23187-23193).

In response to the arguments of the Applicant in the paper mailed on April 1, 2005, the Examiner notes that: *“The Imai Declaration has shown no particular feature of the immunization methods of Applicant, as compared to the immunization methods of the ‘257 patent, that would favor the production of inhibitory antibodies. Accordingly, based upon the evidence provided by the Imai declaration, about 40% of the neurotactin-specific antibodies of the ‘257 patent would have inhibited the binding of fractalkine to CX3CR1.”* (from page 3, line 3 from bottom to page 4, line 2 of the Outstanding Office Action)

However, the antibodies actually produced in the Examples of the ‘257 patent are polyclonal antibodies against the entire extracellular domain of murine neurotactin (column 4, Example 7). The ‘257 patent only discloses the possibility of using a monoclonal antibody (column 7, lines 3-4). The ‘257 patent is also silent about the suppression of an interaction between CX3CR1 and fractalkine.

As shown in the Imai declaration, a monoclonal antibody raised against the extracellular domain of human fractalkine does not necessarily suppress the interaction between CX3CR1 and fractalkine. In the absence of information regarding the ability to suppress such an interaction, one skilled in the art cannot select an inhibitory monoclonal antibody among monoclonal antibodies raised against the extracellular domain of human fractalkine.

It is axiomatic that a prior art reference must teach every element of a claim in order to anticipate that claim. The ‘257 patent does not disclose a method for treating an autoimmune disease comprising a step of selecting a monoclonal antibody which suppresses the interaction between CX3CR1 and neurotactin (fractalkine). The ‘257 patent fails to teach every element of claims 9, 10 and 16. Therefore, the methods of claims 9, 10 and 16 are not anticipated by the ‘257 patent, and, furthermore, could not be rendered obvious by the ‘257 patent.


### CONCLUSION

Applicant again thanks the Examiner for his careful review of the case. The claims have been amended to obviate all rejections. Based on the Remarks presented above, Applicant

respectfully submits that Claims 9, 10 and 16 are now in condition for allowance. A Notice to that effect is respectfully requested.

Please charge any fees that may be associated with this matter, or credit any overpayments, to our Deposit Account No.: 03-1721.

Respectfully submitted,



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Dated: September 13, 2005

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